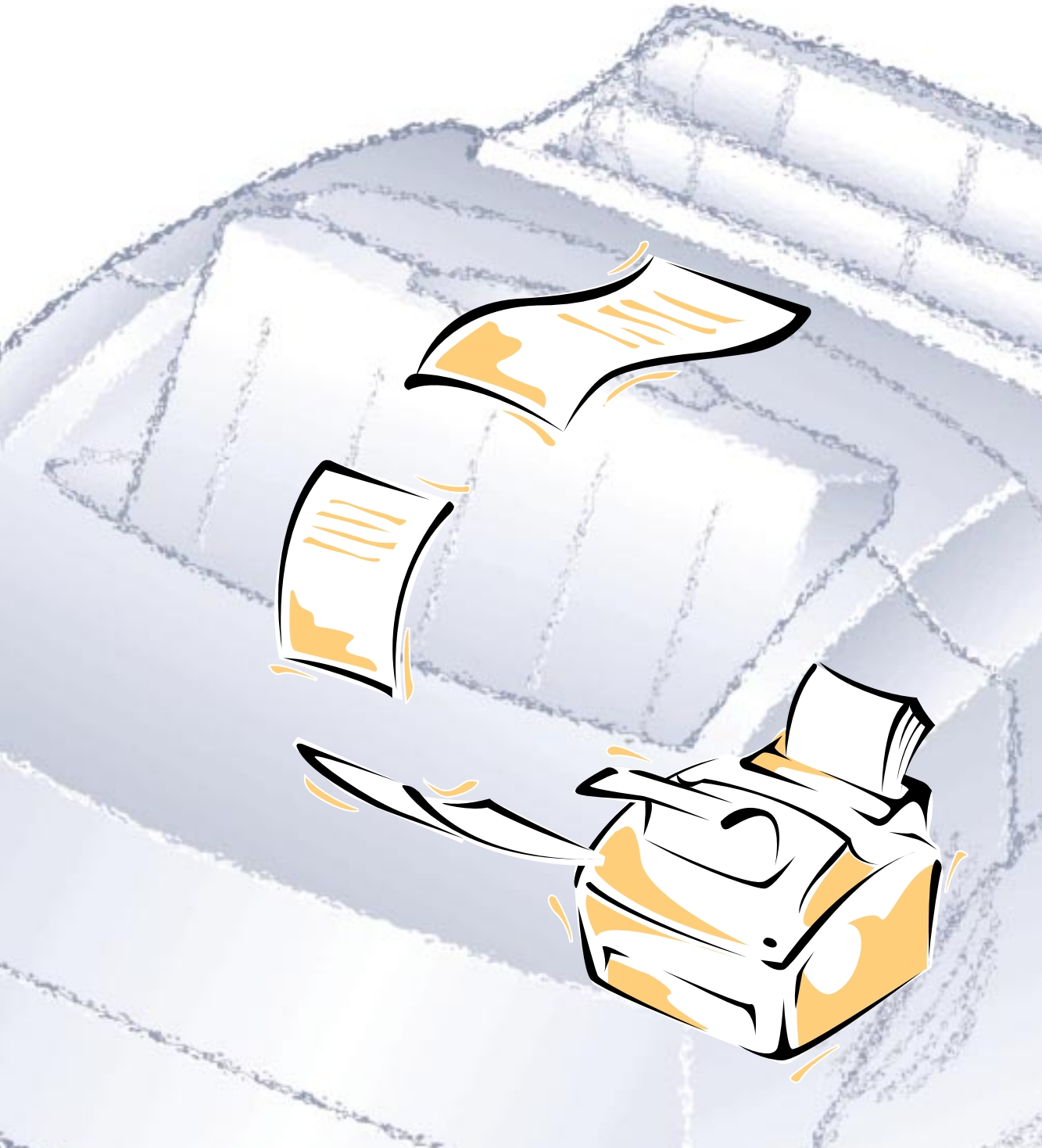


**LASER PRINTER**  
**ML-5050G Series**  
User's Manual



## Using Your Documentation

The following documentation is supplied with the ML-5050G Series to help you use your new Samsung laser printer.

### Setup Guide

This manual describes how you unpack, set up, and start using your ML-5050G Series, including how to install the printer driver, which you must install in order to use the ML-5050G Series for printing.

### User's Manual

This manual offers detailed information on how to operate your ML-5050G Series. It includes maintenance, troubleshooting, options, and specifications.

This manual is provided for information purposes only. All information included herein is subject to change without notice. Samsung is not responsible for any damage, direct or indirect, arising from or related to use of this manual.

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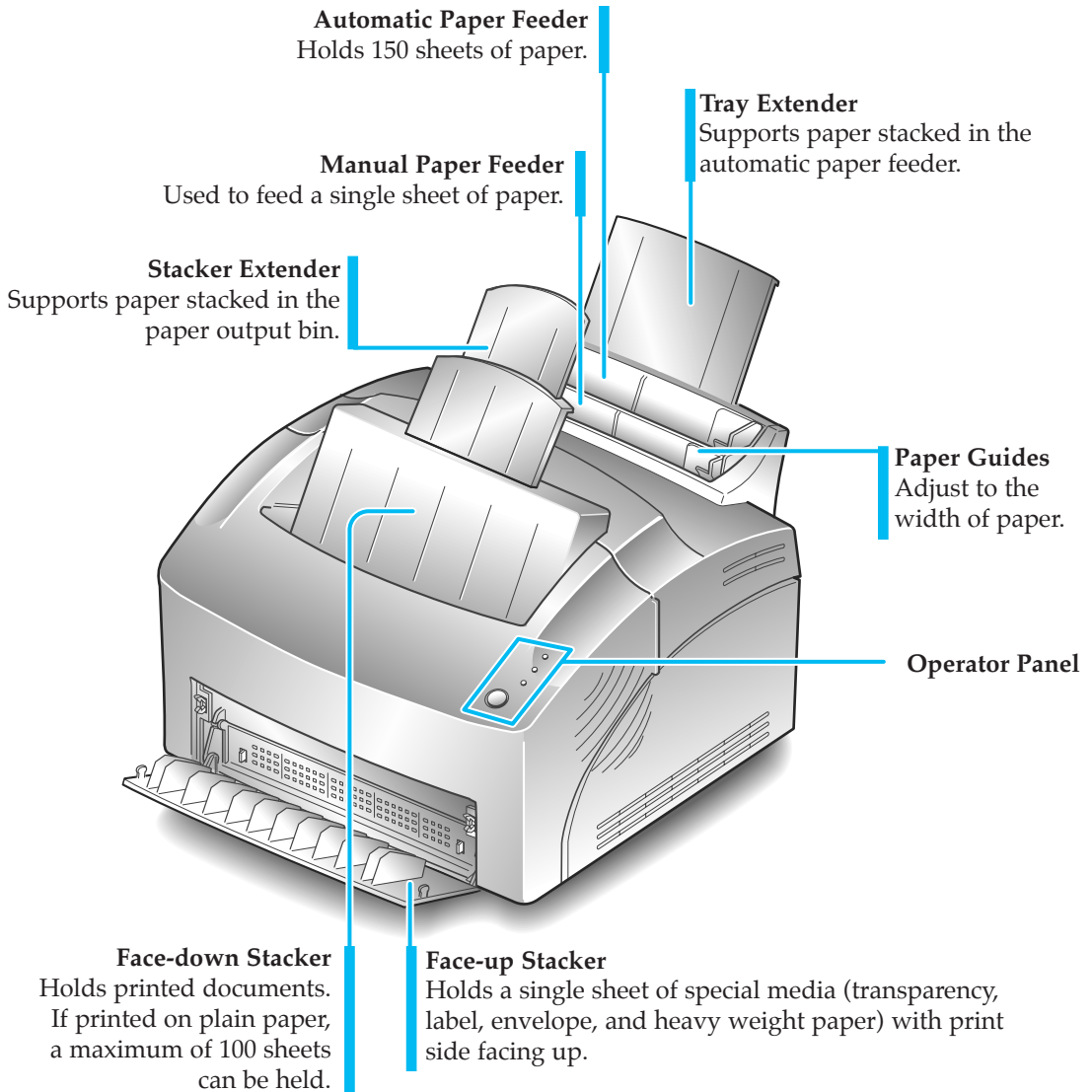
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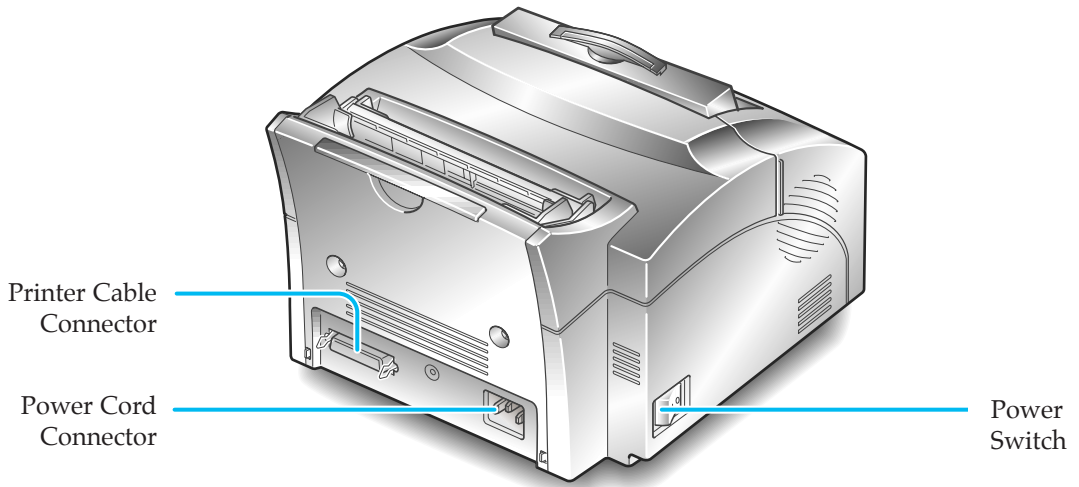
# Introducing Your Printer

## Control Locations and Functions

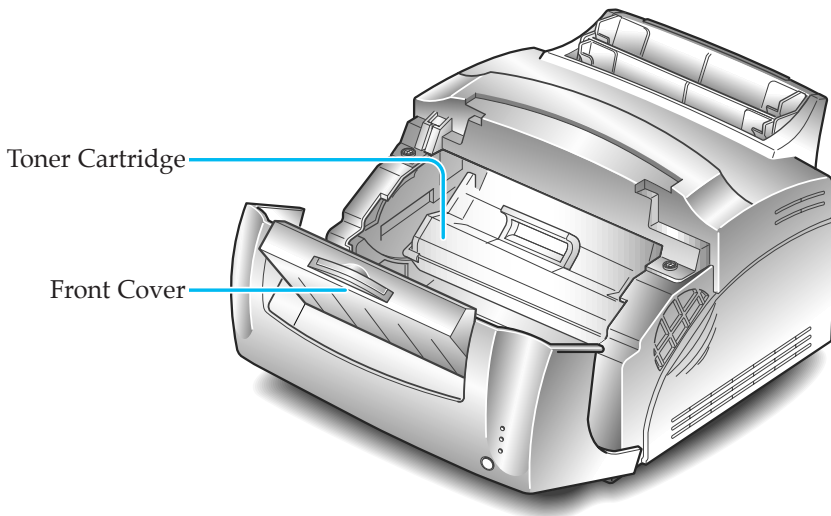
### Front View



## Rear View

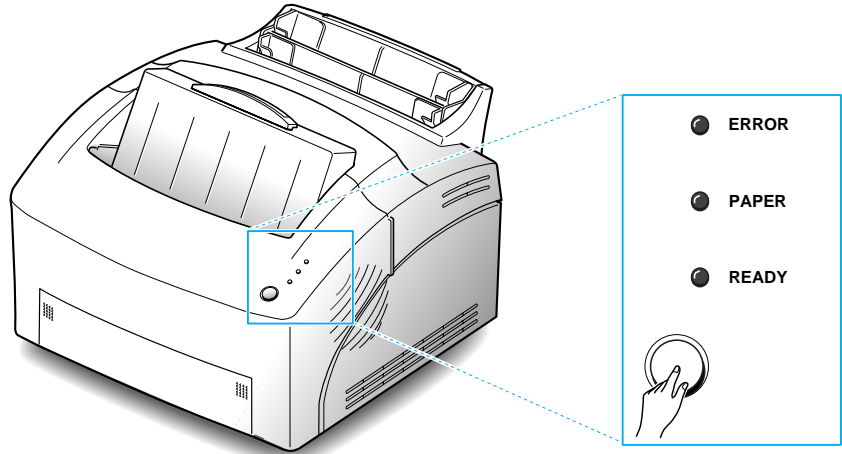


## Inside



## Operator Panel

The operator panel has three indicator lights and one button.



## Indicator Lights

INDICATOR	DESCRIPTION
READY (on)	The printer's power is 'ON'.
READY (blink)	The printer is receiving or processing data.
ERROR (on)	<ul style="list-style-type: none"><li>• There is no image cartridge installed, or the cover is open.</li><li>• Print error occurs.</li><li>• If the PAPER light is also on, there is paper jammed.</li></ul>
PAPER (on)	The paper bin is empty.



# Paper Handling

## Selecting Paper Types and Feed Source

One of the most important things you can do to assure the best possible print quality from your printer is to select the correct paper. Your printer produces letter quality output on most plain bond paper, including cotton bond and photocopying paper; it does not require special paper. However, the print quality varies with different paper types. Be sure to test a small quantity of paper before you purchase a large quantity.

You can print on any of the following paper types:

Type	Size	Feed Source	Capacity
Plain paper (20 to 30 lb)	Letter: 8 1/2 x 11" Legal: 8 1/2 x 14" Executive: 7 1/4 x 10 1/2" A4: 210 x 297 mm A5: 148 x 210 mm B5: 182 x 257 mm Folio: 8 1/2 x 13"	Automatic feeder	150 sheets (Approx.)
		Manual feeder	1 sheet
Envelopes	COM-10: 4 1/8 x 9 1/2" Monarch: 3 7/8 x 7 1/2" C5: 162 x 229 mm C6: 114 x 162 mm DL: 110 x 220 mm	Automatic feeder	10 envelopes (Approx.)
		Manual feeder	1 envelope
Cards (16 to 32 lb) Transparency Film Paper Labels		Automatic feeder	10 items (Approx.)
		Manual feeder	1 item

**Notes:**

- When you print, select the correct paper size and source in your application.
- Depending on paper thickness, the maximum capacity may be reduced.

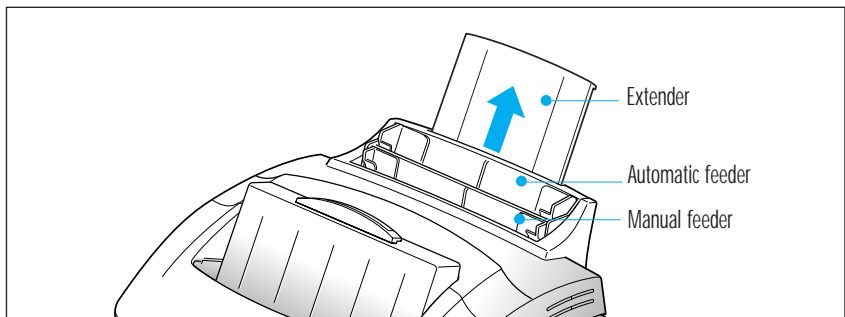
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## Loading a Stack of Paper

You can stack paper, envelopes, card stocks, labels, or transparencies in the automatic paper feeder to feed automatically. The automatic feeder can hold a maximum of 150 sheets of plain paper, and 10 envelopes or other print media. The maximum capacity may be reduced, depending on the thickness of the paper type selected.

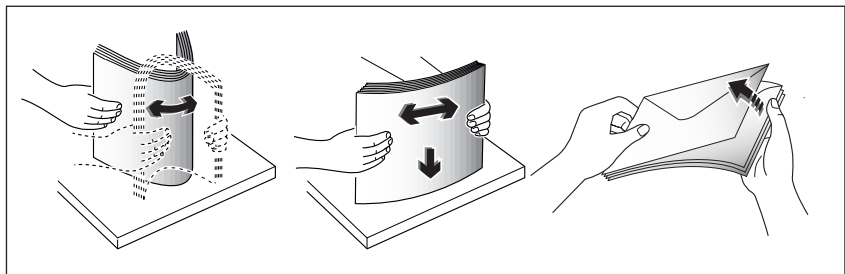
*Note: If you experience feeding problems, try printing item at a time from the manual feeder. See page 9.*

### 1. Pull the extender on the automatic feeder up until it stops.



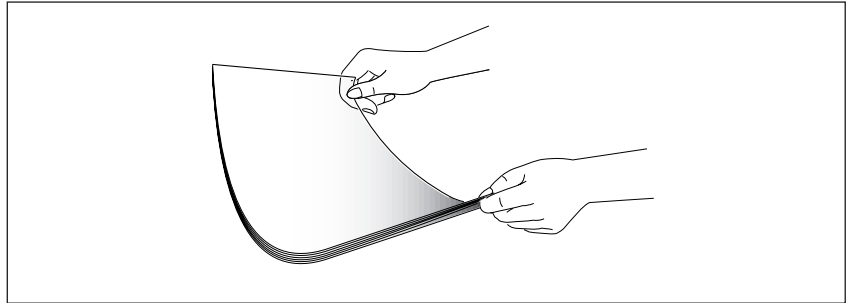
### 2. Prepare the print material for loading.

- For paper and envelopes:
  - Flex paper or fan envelopes back and forth. Do not fold or crease the paper. Straighten the edges on a level surface.

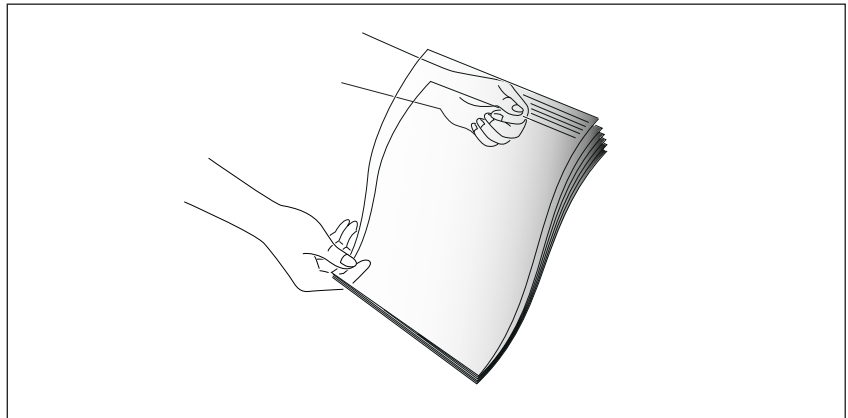


*Note: If envelopes jam while printing, try reducing the number of envelopes in the automatic feeder.*

- For transparencies:
  - Hold the transparencies by the edges and avoid touching the print side.

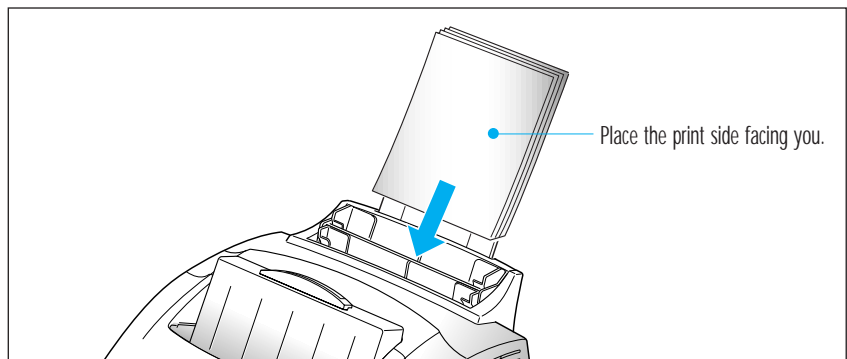


- Fan the stack of transparencies to prevent feeding failures. Be careful not to scratch or leave fingerprints on the print sides.

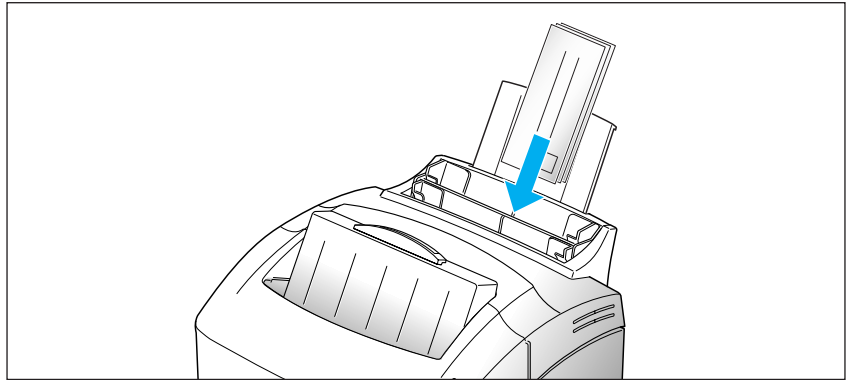


**3. Load the print material in the automatic feeder.** Do not load too much print material. Do not different paper types. See the following directions on how to load each type of print material.

- Load paper or transparencies with the print side facing you.



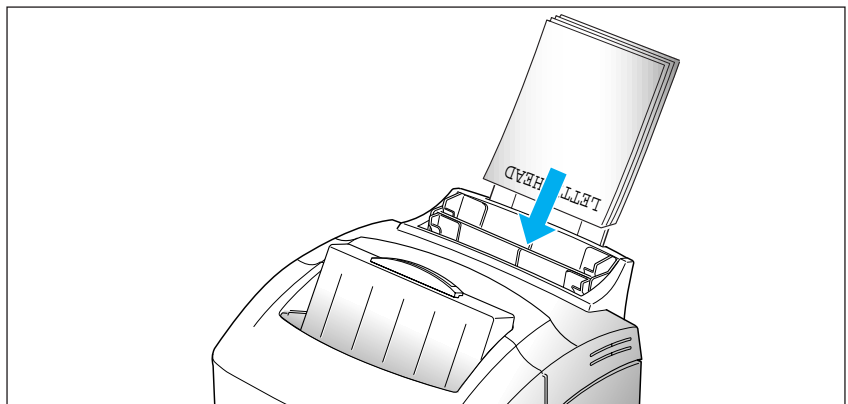
- Load envelopes with the flap side facing away from you. The stamp area is on the bottom right corner. The end of the envelope with the stamp area enters the feeder first.



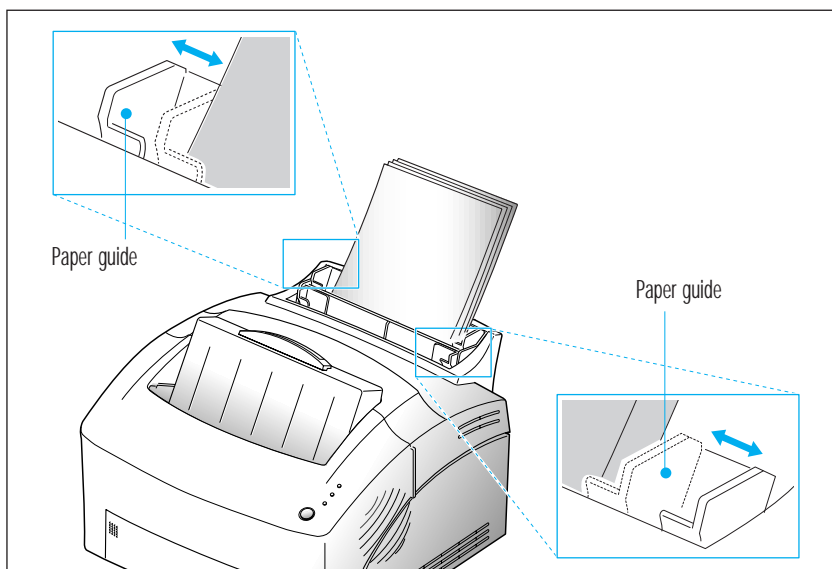
**Notes:**

- Do not feed stamped envelopes. The stamp is shown for placement only.
- Never use envelopes with clasps, snaps, windows, coated linings, or self-stick adhesives.
- These envelopes may severely damage the printer.

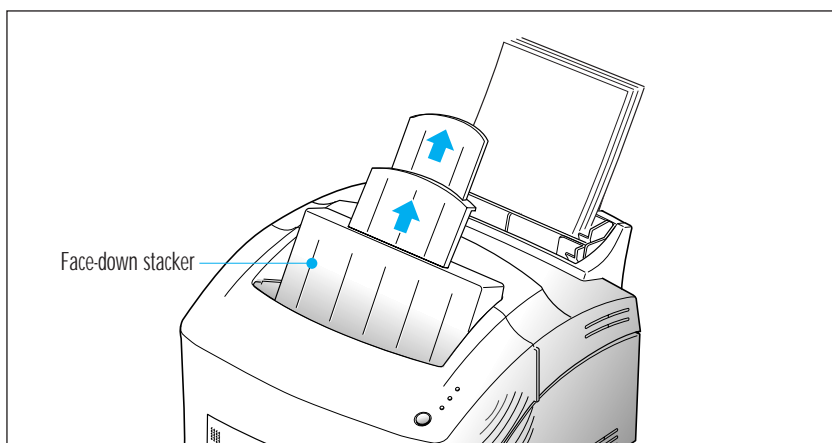
- Load letterhead paper with the design facing you. The top edge of the sheet with the logo should enter the printer first.



4. **Adjust the guides to the width of the print material.** Slide the guides until they lightly touch the stack of print material. Do not bend the print material.



5. **Pull up the extender on the face-down stacker.** The face-down stacker can hold a maximum of 100 printed pages.

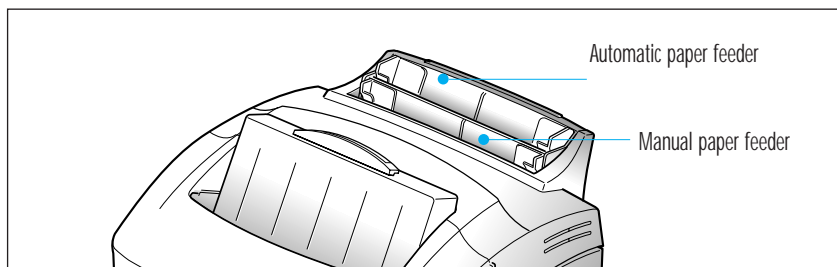


6. Before starting your print job, make sure you select the correct paper size and feed source in your application.

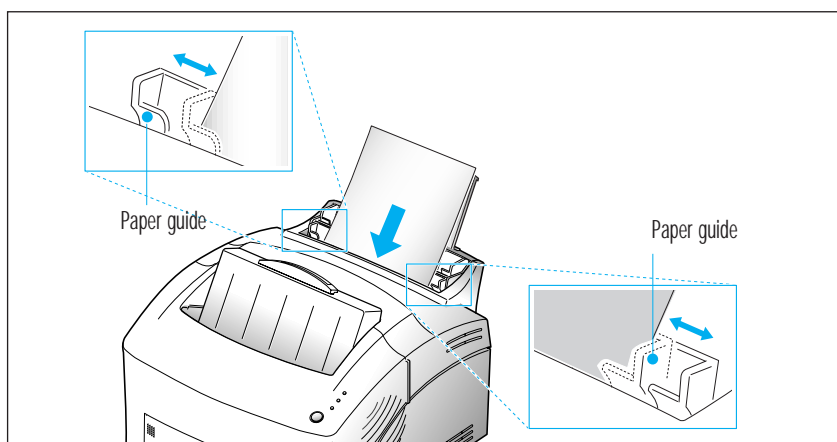
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## Feeding Manually

Use the manual feeder to feed one sheet at a time into your printer. The manual feeder is in front of the automatic feeder.



1. If necessary, open the face-up stacker. See page 10.
2. Load the print material in the manual feeder and adjust the paper guides to the width of the print material.  
See the instructions to load each type of material on page 5.

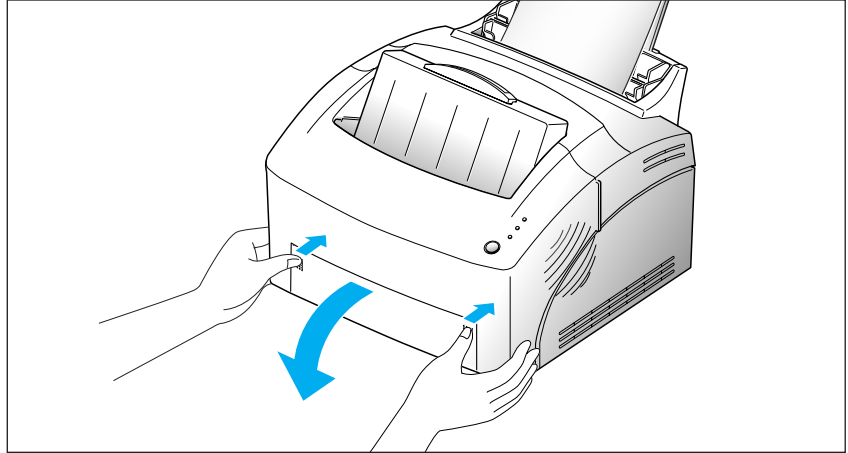


3. Gently push it all the way in.
4. Before starting your print job, make sure you select the correct paper size and feed source in your application.
5. Press and hold the button on the operator panel for about 2 seconds. Printing will start.
6. If you have more than one page to print, the Printer Status Window on the computer screen alerts you to feed the next sheet each time the printer is ready to print the next page. Press and hold the button for about 2 seconds until the printer pulls in the paper and starts printing.

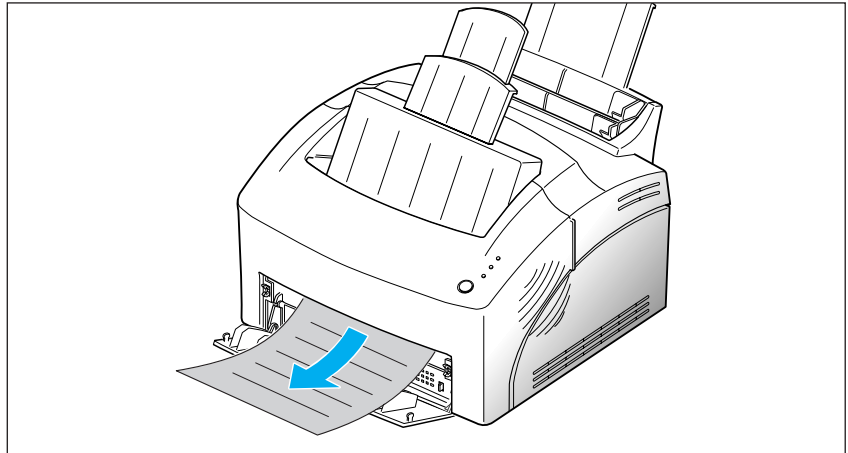
*Notes: If you press the button without paper in the manual feeder, the printer will automatically use paper in the automatic paper feeder.*

## Using the Face-up Stacker

1. Push both sides of the stacker marked  , and the stacker will open.



2. If you use the face-up stacker, printed pages will exit through the front output path, with the printed side up.



### Notes:

- The face-up stacker may not hold the printed materials properly.
- The printed pages will not stack in the standard face-down stacker unless you close the face-up stacker. The face-down stacker can hold up to 100 printed pages. When you finish using the face-up stacker, you must close it.

---

## Paper Guidelines

When selecting or loading paper, envelopes, or other special media, keep these guidelines in mind:

- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- Use cut-sheet paper only. You cannot use multipart paper.
- Use only high quality, copier grade paper. Avoid paper with embossed lettering, perforations, or texture that is too smooth or too rough.
- Colored paper should be of the same high quality as white photocopy paper. The pigments must withstand the printer's fusing temperature of 392 °F (200 °C) for 0.1 second without deterioration. Do not use paper with a colored coating that was added after the paper was produced.
- Pre-printed forms must be printed with non-flammable, heat-resistant inks that do not melt, vaporize, or release hazardous emissions when subjected to the printer's approximately 392 °F (200 °C) fusing temperature for 0.1 seconds.
- Store paper in its ream wrapper until you are ready to use it. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture, or other conditions that can cause it to wrinkle or curl.
- During storage, moisture-proof wrap (any plastic container or bag) should be used to prevent dust and moisture from contaminating your paper.
- Always use paper and other media that conform with those listed under 'Specifications' on page 33.
- When you choose envelopes, use only well-constructed envelopes with sharp, and well creased folds.
  - DO NOT use envelopes with clasps and snaps.
  - DO NOT use envelopes with windows, coated linings, self-stick adhesives, or other synthetic materials.
  - DO NOT use damaged or poorly made envelopes.
  - DO NOT use envelopes with affixed stamps.



# Operating Your Printer

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## Selecting Your Printer

To use all of the features of your ML-5050G Series printer, make sure it is selected as the default printer. If you use more than one printer, select ML-5050G Series as the default printer in the following manner :

### Windows 95 / 98 / NT 4.0

1. Select **Start, Settings, then Printers.**
2. Double-click **ML-5050G Series.**
3. Select **Set As Default** from the **Printer** menu.

### Windows 3.x

1. Double-click **Control Panel** from the **Main** program group.
2. Double-click **Printers.**
3. Select **ML-5050G Series.**
4. Click **Set As Default printer.**

---

## Printing a Document

This procedure describes the general steps required for printing from various Windows applications. The exact steps for printing a document may vary depending on the application you are using. Refer to your application's documentation for the exact printing procedure.

1. **Start the program you are using to create the document, and/or open the document you want to print.**
2. **Choose Print or Print Setup from the File menu.** The Print or Print Setup dialog appears to make changes to the printer setting.
3. **If you click on Properties, Setup, or Options in the dialog box, you'll access the printer driver and you can make any additional setting as appropriate for printing your document.** See 'Print Settings' on page 14. The settings you can change depend on the printer you selected.
4. **Select OK to close the dialog box.**
5. **After making any necessary changes to the print parameters, select OK to start the print job.**

*Note: The way you access the printer driver varies depending on the programs you use.*

---

## Print Settings

Most Windows applications allow you to make changes to the printer settings. This changes the number of copies, paper orientation, and paper size.

*Note: Most Windows applications will override settings you specify in the printer driver. Change all printer settings available in the software application first, and any remaining settings with the printer driver.*

### In Windows 95/98

To access ML-5050G Series settings from the Windows 95/98 Printers folder :

1. Open the Printers folder (**Start/Settings/Printers**).
2. Right click the printer's icon, and choose **Properties** from the resulting menu.
3. Choose the 32-bit SuperDriver Setup tab.

### In Windows NT 4.0

To access ML-5050G Series settings from the Windows NT 4.0 Printers folder :

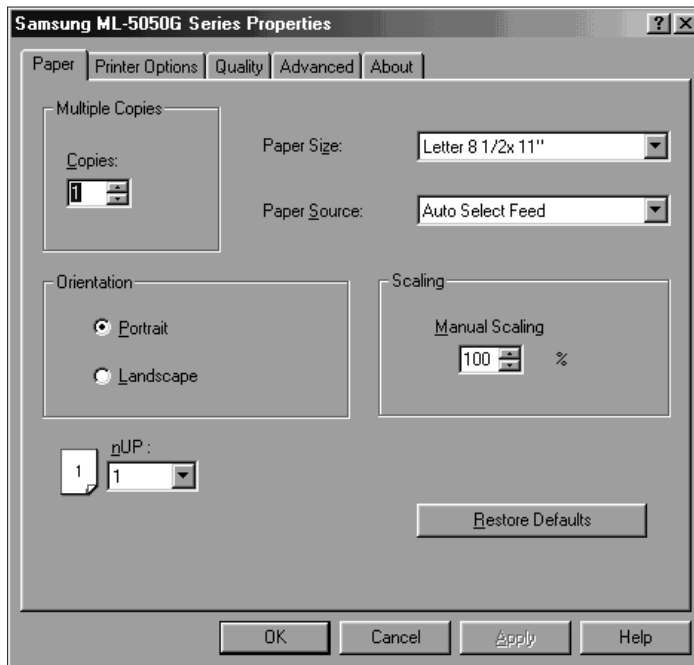
1. Open the Printers folder (**Start/Settings/Printers**).
2. Right click the printer's icon, and choose **Document Defaults** from the resulting pop-up menu.

### In Windows 3.1x

To access ML-5050G Series settings from the Windows 3.1X Control Panel :


1. Open the **Control Panel** from the **Main** group and double click the **Printers** icon.
2. Choose the ML-5050G Series from the list of available printers and click the **Setup** button.

The following Properties dialog box appears.



## Paper Tab


On the **Paper** tab, you can change the number of copies, paper size, paper source, page orientation, nUP and scale the image of your print job.

For **Help** on each item, click  at the top of the dialog box, and then click the desired item.

*nUP: For multi-page documents, you can choose to have more than one document page per physical page. Choices are 1,2,4,9, and 16.*

## Printer Options Tab

On the printer Options, you can set the toner density, print a test page, and set the time to specify when your printer goes into an energy saving mode if the printer is idle.


For **Help** on each item, click  at the top of the dialog box, and then click the desired item.

## Quality Tab

On the **Quality** tab, you can adjust the print quality of your document by setting resolution. Higher resolution looks better but takes longer to print and requires more memory. You can also adjust the Lighten/Darken and contrast for all graphics in your documents.

**Output Type's Quality** : Each of the selections on the output quality correspond to a pre-determined halftone is used by the driver. If text is selected then a halftone that is optimal for text printing is used by the driver. The normal option uses the new halftone that we have optimized for your printer engine. Photographic selects a halftone that is optimized for printing images at a higher quality.

**Lighten/Darken/Contrast** : When you're printing documents that contain areas of gray, you may find the results you get from the ML-5050G Series driver can be significantly lighter than from other printer drivers (especially laser printer drivers). The ML-5050G Series driver corrects output to render grays more nearly like those you see on your screen; most other drivers do not. You can use any of the above settings to alter the output to your liking.

For **Help** on each item, click  at the top of the dialog box, and then click the desired item.

## Advanced Tab

The options on the Advanced Tab are designed mostly for troubleshooting application or file specific problems.

**Color Documents** : Some applications do not recognize the inherent color-handling capabilities of your ML-5050G Series printer. It is for these applications that the option Color Document exists. One application that requires this setting to be on is Microsoft PowerPoint. If you find that you are not getting correct grays from an application, you should try toggling this option.

**Graphics** : Microsoft's specifications for communicating to Windows printer drivers are sufficiently "loose" that different software developers have invented (or borrowed) special driver "escapes" (unusual instruction codes). The set of escapes invented by Micrografx can provide substantial performance gains. Applications that either require or work better with Graphics turned on include Lotus Freelance for Windows and most Micrografx software. In general, if performance when rendering complex graphics is either very slow, or yields unsatisfactory output, you should try toggling this setting.

**Dither Line :** Most output devices rely on dithering to achieve shades of gray. With the Dither Lines option on (the default), your ML-5050G Series printer gives you accurate grays even if it has to dither them. You get exactly what you ask for. However, fine dithered lines appear dashed instead of solid. With the Dither Lines option off, your ML-5050G Series printer maps text and lines to the nearest gray. For black & white output, grays that are darker than about 50% map to black; lighter grays map to white. For color, colors map to the nearest gray.

**Dither Text :** Most output devices rely on dithering to achieve shades of gray. With the Dither Text option on (the default), your ML-5050G Series printer gives you accurate grays even if it has to dither them. You get exactly what you ask for. However, small dithered text is difficult to read. With the Dither Text option off, your ML-5050G Series printer maps text and lines to the nearest gray. For black & white output, grays that are darker than about 50% map to black; lighter grays map to white. For color, colors map to the nearest gray.

**Accept Larger Bitmap Pattern :** When an application sends a bitmap fill pattern (also called a “pattern brush”) to the printer, the expected, standard size is 8 pixels square. Some applications are able to send larger patterns. If Accept Larger Bitmap Pattern is on, and you encounter output where your bitmap fills have repeating pattern anomalies in them, try turning it off. Bitmap fill patterns can be used for any repeated design, or even to simulate grayscale dithering. Some applications send box tints as bitmap patterns. One problem that arises with this is that some programs don’t make allowances for the difference between screen resolution and printer resolution. (Another problem is that some do!) The typical result is that patterns printed to a laser printer get very small, and tints get too dark.

**Scale :** Your ML-5050G Series has a process that automatically enlarges the bitmap fill patterns so that the output more closely matches the screen. For example, with the default, “automatic” setting of Scale: 0, patterns that come from a VGA system (96x96 logical pixels per inch) are enlarged three times to (almost) match the 300x300 dpi of a laser printer. If you set Scale to 1, your printer can handle the brush patterns exactly as they come from the application-no scaling. You can also force your printer to scale by 2, 3, 4, or more times by entering larger numbers.

**Adobe and True Type Font Engine Checkboxes :** *The primary use of this feature is for troubleshooting by a process of elimination with a limited number of applications. If your printing works OK, you should ignore these settings. In some circumstances, certain applications can cause problems with your ML-5050G Series printer when the document uses typefaces installed in Adobe Type Manager software (ATM) or TrueType. If you have both font engines, you could also run into substitution problems. Turning the TrueType checkbox on speeds up handling of True Type fonts by sending them as text. With this option off, fonts are handled as graphics. This can be useful if you are printing over a network to a server that does not have the same typeface you are using on your workstation PC. Since the data is sent as graphics, you do not run into font substitution problems. If you are printing with characters found in languages like Japanese or Chinese (also called double-byte characters), the True Type checkbox should be off.*

### About Tab

The About dialog box displays the software version and other useful information about your printer.

# Troubleshooting

## Poor Print Quality

Problem	Action
Light or blurred characters	<ul style="list-style-type: none"><li>• Hot/humid or cold/dry weather conditions may affect how well toner adheres to paper. Select the next darker print setting.</li><li>• Make sure the Toner Cartridge is installed correctly.</li><li>• The Toner Cartridge may be out of toner. Install a new Cartridge.</li><li>• Make sure you are using the correct type of paper. See “Selecting Paper Types and Feed Source” on page 4.</li></ul>
Smudged or dark characters	<ul style="list-style-type: none"><li>• The Toner Cartridge may be defective. Remove it and check for damage. Install a new Cartridge if needed.</li><li>• Make sure the paper is straight and unwrinkled.</li></ul>
Irregular or missing dots	<ul style="list-style-type: none"><li>• If printing on transparencies, try changing the fill pattern in your application.</li><li>• The paper may be too damp. Try printing with a different batch of paper.</li></ul>
Solid black areas on transparencies or paper contain white streaks	<ul style="list-style-type: none"><li>• Try using a different fill pattern in your application.</li><li>• The Toner Cartridge may be defective. Remove and check the Cartridge for damage. Install a new Cartridge if needed.</li><li>• Try a different type of paper. Paper designed for use with xerographic copiers produces the best quality.</li></ul>
Poor printer quality	<ul style="list-style-type: none"><li>• Try a different type of paper. Paper designed for use with xerographic copiers give the best quality.</li><li>• You may be printing on the wrong side of the paper. Some paper has a right side for printing. If the print quality is not as clear as you would like it to be, try turning the paper over and printing on the other side.</li></ul>



## Paper Problems

Problem	Action
Paper sticks together/multiple sheets of paper feed	<ul style="list-style-type: none"><li>• Remove paper from the paper feeder and flex or fan the paper.</li><li>• Make sure there is not too much paper in the paper tray. Depending on the thickness of your paper, the automatic feeder can hold up to 150 sheets.</li><li>• Make sure you are using the correct type of paper. See “Selecting Paper Types and Feed Source” on page 4.</li><li>• Different types of paper may be stacked in the automatic feeder. Load just one type of paper. Do not mix paper types.</li></ul>
Paper fails to feed	<ul style="list-style-type: none"><li>• Remove the paper from the paper feeder and flex or fan the paper.</li><li>• Make sure the paper source you selected in your application is correct.</li><li>• Remove any obstructions inside the printer.</li></ul>
Paper skews or buckles	<ul style="list-style-type: none"><li>• Make sure there is not too much paper in the automatic feeder. Depending on paper thickness, the automatic feeder can hold up to 150 sheets of paper.</li><li>• Make sure the paper guides do not cause the paper to bend in the paper feeder.</li><li>• Make sure you are using the correct type of paper. See “Selecting Paper Types and Feed Source” on page 4.</li></ul>
Envelopes skew	<ul style="list-style-type: none"><li>• Make sure the paper guides do not cause envelopes to bend in the paper feeder.</li><li>• Make sure the envelopes are loaded properly, and that there are no more than 10 envelopes in the automatic feeder.</li></ul>
Envelopes fail to feed correctly	<ul style="list-style-type: none"><li>• Try a different kind. Envelopes designed for laser printers will produce the best results.</li><li>• Envelopes may not match the specification of this machine.</li></ul>

Problem	Action
Transparencies or envelopes do not feed correctly	<ul style="list-style-type: none"> <li>• The film or envelopes may not be loaded correctly. Make sure you load no more than 10 transparencies or envelopes in the automatic feeder. Depending on the thickness, the maximum capacity may need to be reduced.</li> <li>• When you feed paper into the manual feeder, you must load one sheet at a time.</li> </ul>
Repeated paper jams occur	<ul style="list-style-type: none"> <li>• The paper you are using may be causing the jams. Fan the paper before stacking it in the paper feeder. This keeps the sheets from sticking together.</li> <li>• Check that the paper you are using and your printing environment are within the specifications of the unit.</li> </ul>

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## Printing Problems

Problem	Action
The operator panel indicator lights do not come on when printer is turned on	<ul style="list-style-type: none"> <li>• Make sure the printer power cord is firmly attached at the back of the printer and at the electrical outlet.</li> <li>• Be sure to turn on the printer power switch.</li> </ul>
Printer seems to be printing, but pages are blank	<ul style="list-style-type: none"> <li>• Make sure the Toner Cartridge is installed.</li> <li>• The Toner Cartridge may be empty. Install a new Toner Cartridge.</li> <li>• The Toner Cartridge may be defective. Remove and check the Cartridge for damage. Install a new Cartridge if needed.</li> </ul>
Printer power is on, but nothing prints	<ul style="list-style-type: none"> <li>• Make sure that the printer interface cable is firmly inserted into the interface connector of the printer.</li> </ul>
Printer does not print even though a paper jam has been cleared	<ul style="list-style-type: none"> <li>• Open and close the cover to restart the printer.</li> </ul>

Problem	Action
Unexpected characters are printed or characters are missing	<ul style="list-style-type: none"> <li>• Change the parallel interface cable.</li> <li>• Make sure you are using the correct printer driver.</li> </ul>
Printer prints very slowly	<ul style="list-style-type: none"> <li>• Graphics print more slowly than text.</li> </ul>
Cannot close the printer cover	<ul style="list-style-type: none"> <li>• Make sure the Toner Cartridge is properly installed.</li> </ul>
Printout does not match paper size	<ul style="list-style-type: none"> <li>• Paper may not be loaded and aligned correctly in the paper feeder.</li> <li>• The application's paper size and margin settings may be incorrect.</li> <li>• The selected printer driver may be incorrect. Make sure you select the ML-5050G Series as the default printer in your application.</li> </ul>

## Software Problems

Problem	Action
The printer does not print	<p>Bi-directional communication may not be setup properly.</p> <ul style="list-style-type: none"> <li>• Check that the parallel port is set for bi-directional mode in the computer's BIOS. If you do not know how to enter the BIOS or make the changes, contact the computer manufacturer.</li> <li>• Make sure that the cable is bi-directional IEEE-1284 compliant parallel interface cable.</li> </ul>
Your printer driver conflicts with existing printer driver.	<ul style="list-style-type: none"> <li>• Change the ports of existing printer drivers to FILE.</li> <li>• Uninstall the existing printer drivers before you install your printer driver.</li> </ul>
The printer does not print in DOS environment.	<p>This printer not support DOS (DOS windows &amp; pure DOS) application.</p>

Problem	Action
The printer does not print in network.	Your printer driver supports Microsoft network. It does not support Unix, OS/2.
The computer does not recognize the setup CD-ROM.	<ul style="list-style-type: none"> <li>• Make sure that you select the correct CD-ROM drive.</li> <li>• Check if the CD-ROM is damaged.</li> </ul>

## Before You Call For Service

If you're unable to solve printer problems, you may want to call for service. Before calling, however, check these things:

- Is the power cord plugged into the printer?
- Is the power cord plugged directly into a wall outlet?
- Is your printer connected properly to your computer?
- Are all other devices attached to your printer plugged in and turned on?
- Is the wall outlet live?
- Has a power outage occurred in your area?
- Is a Toner Cartridge installed in the printer?
- Is the cover closed completely?

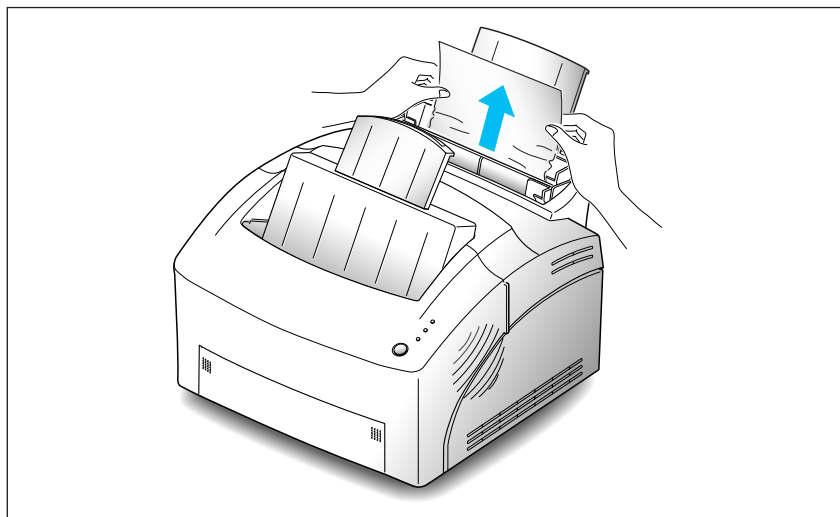
Once you've checked all these things, turn your printer off and back on again. If your printer is still not operating properly, call your point of purchase for service.

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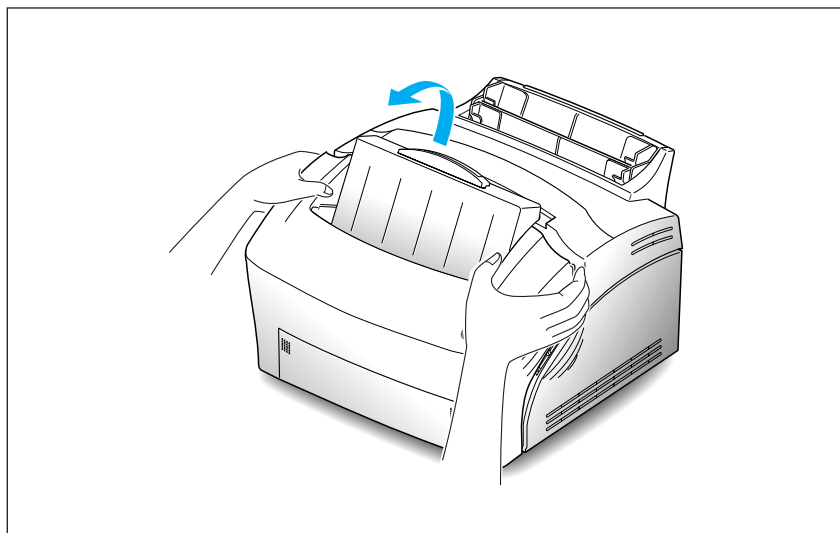
## Clearing Paper Jams

If the paper has just started to feed from the feeder when the jam occurs:

1. Pull the jammed paper back out of the feeder toward you.

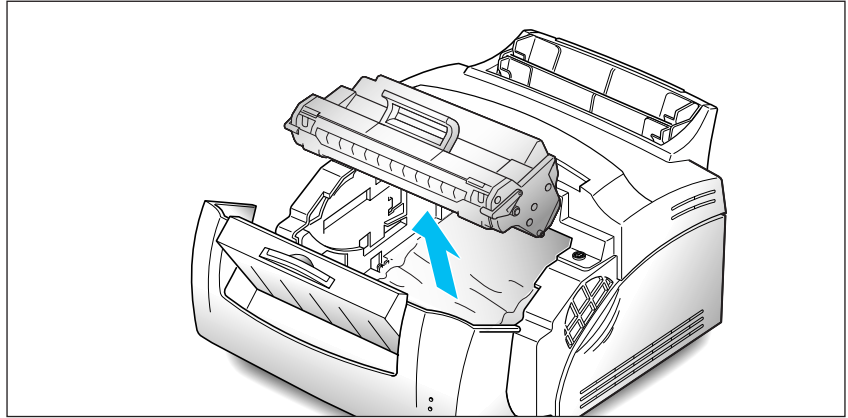


2. Open and close the cover to resume printing.

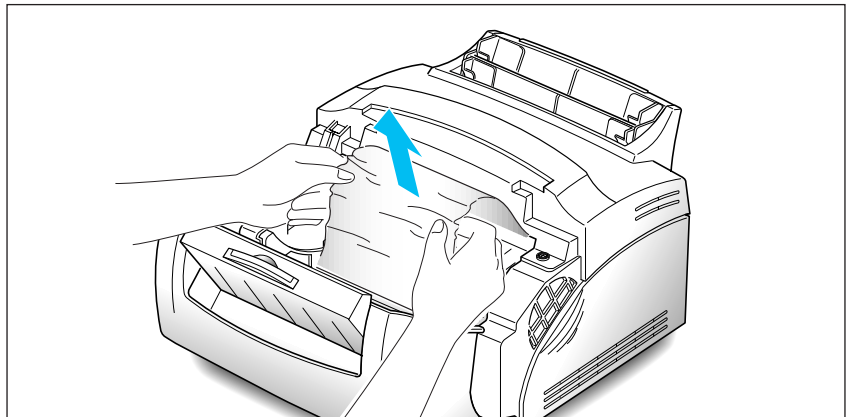


If the jam occurs inside the printer:

1. **Open the cover, and remove the Toner Cartridge.**



2. **Grasp the paper on both sides and gently pull out toward you.**



If the jam occurs near the fusing unit, do not pull the paper through the fuser or you may damage the fusing unit.

3. **Check that there is no other paper in the printer.**
4. **Close the cover. The printer continues printing.**

## Tips for Avoiding Paper Jams

By carefully selecting print materials and loading them properly, you should be able to avoid most paper jams. If jams occur frequently, make sure you are following these tips to avoid jams.

- Follow the procedures in “Loading a Stack of Paper” on page 5 to load paper properly.
- Do not overload the paper feeder. The automatic feeder can hold up to 150 sheets and the manual feeder can hold only one sheet at a time.
- Flex, fan, and straighten the paper before loading it.
- Fan stacks of labels or transparencies before loading them into the automatic feeder. If jams do occur using the automatic feeder, try feeding one sheet at a time in the manual feeder.
- Do not load wrinkled, creased, damp, or highly curled paper.
- Do not mix paper types in the automatic feeder.
- Use only recommended print materials.
- Make sure the recommended print side is face up when loading the feeders.
- Keep print materials stored in an acceptable environment.

# Supplies and Maintenance

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## Cartridge Maintenance

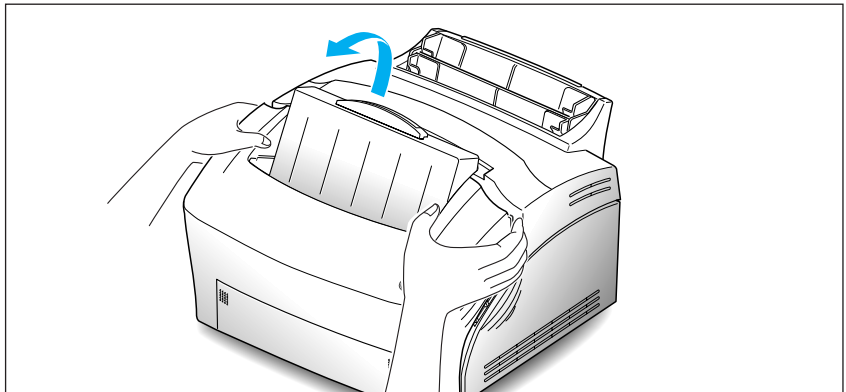
To get the maximum benefit from your Toner Cartridges:

- Do not remove a Toner Cartridge from its packaging until you are ready to install it.
- Do not refill the Toner Cartridge. **The printer warranty does not cover damage caused by using a refilled Cartridge.**
- Store the Toner Cartridge in the same environment as the printer.
- Do not remove a Toner Cartridge from the printer except to replace it, clean it or clear a paper jam. Replace the Cartridge immediately.

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## Replacing Toner Cartridge

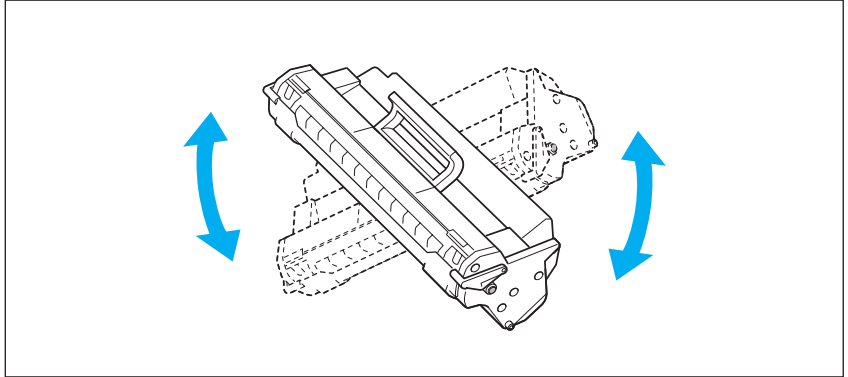
1. Hold the printer cover using both hands, and pull it toward you.



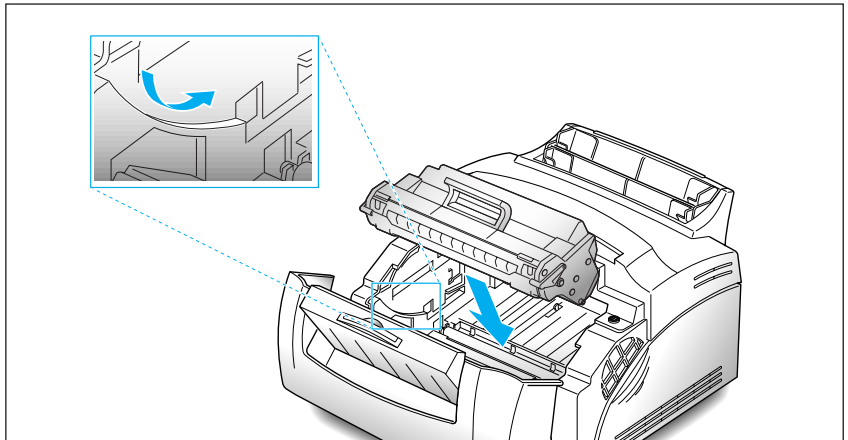


**2. Lift up and pull out the old Toner Cartridge.** Follow the instructions printed on the cartridge box to recycle the used cartridge.

**3. Unpack the new Toner Cartridge, remove the sealing tape, and slowly and gently rock it 5 or 6 times to distribute the toner.**



**4. Find the cartridge slots inside the printer, one each side.**



**5. Grasp the handle and slide the Cartridge down between the Toner cartridge slots.** Gently push down on the Cartridge until it stops in place.

**6. Close the printer cover.**

# Appendix

## FCC Regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Do not make any changes or modifications to the equipment unless specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of FCC Rules.

## Canadian Radio Interference Regulations

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus”, ICES-003 of the Industry and Science Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques”, NMB-003 édictée par l’Industrie et Sciences Canada.

# FCC DECLARATION OF CONFORMITY

## according to FCC Part 15

1. **Product Name** : Laser Printer
2. **Model Number** : ML-5050G Series
3. **FCC Rules** : TESTED BY COMPLY WITH FCC PART 15 CLASS B
4. **Operating Environment** : FOR HOME OR OFFICE USE
5. **FCC Compliance Statement**

This device complies with Part 15 FCC rules. Operating is subject to the following two conditions : (1) This device may not cause harmful interference, and  
(2) This device must accept any interference received, including interference that any cause undesired operation.

### 6. Information to User

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna
2. Increase the separation between the equipment and receiver
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
4. Consult the dealer or an experienced radio/TV technician for help.

**CAUTION** : Changed of modifications not expressly approved by the manufacturer responsible for compliance could be void the user's authority to the equipment

### Responsible Party for Product Compliance

Samsung Electronics America  
American QA Lab  
85 West Tasman Dr.  
San Jose, CA 95134

# EC Declaration of Conformity

We,

SAMSUNG ELECTRONICS CO.,LTD  
#259, Gong Dan-Dong, Gumi-City, Kyung Buk, Korea

declare sole responsibility that the

ML-5050G Series Laser printer

meets the intent of Directive 89/336/EEC for Electromagnetic Compatibility and Low Voltage Directive 73/23/EEC.

Compliance was demonstrated to the following specifications as listed in the official journal of the European Communities:

EN 50081-Emissions:

EN 55022 Radiated, Class B  
EN 55022 Conducted, Class B  
EN 60555-2 Power Harmonics

EN 50082-Immunity:

IEC 801-2 Electrostatic Discharge  
IEC 801-3 RF Radiated  
IEC 801-4 Fast Transient/Burst

EN 60950-Safety

## Laser Safety Statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

Class I laser products are not considered to be hazardous. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

**WARNING** Never operate or service the printer with the protective cover removed from the Laser/Scanner assembly. The reflected beam, although invisible, can damage your eyes.



**CAUTION** -INVISIBLE LASER RADIATION WHEN THIS COVER IS OPEN. DO NOT OPEN THIS COVER

**VORSICHT** -UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSETZEN.

**ATTENTION** -RAYONNEMENT LASER INVISIBLE EN CAS D'OVERTURE. DANGEREUSE AU FAISCEAU.

**ATTENZIONE** -RADIAZIONE LASER INVISIBLE IN CASO DI APERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.

**PRECAUCION** -RADIACION LASER IVISIBLE CUANDO SE ABRE. EVITAR EXPONERSE AL RAYO.

**ADVARSEL** -USYNLIG LASERSTRÅLNING VED ÅBNING NÅR SIKKERHEDSBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTEELSE FOR STRÅLNING.

**ADVARSER** -USYNLIG LASERSTRÅLNING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN. UNNGÅ EKSPONERING FOR STRÅLEN.

**VARNING** -OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPAND OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN STRÅLEN ÄR FARLIG.

**VARO** -AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.

Laser product labels are located above the print cartridge.

CLASS 1 LASER PRODUCT LASER KLASSE 1 LUOKAN 1 LASERLAITE APPAREIL À LASER DE CLASSE 1 TO IEC 825
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## Safety Information

### PRODUCT SAFETY

USA	UL 1950 (UL LISTING)
CANADA	CSA C22.2 No. 950 & UL 1950 (CSA Certification)
EEC (Europe)	IEC 60950/EN 60950 (TÜV GS Certification)
CB	IEC 60950

### LASER SAFETY

EEC (Europe)	HD 194. & EN 60825
USA	21 CFR, Chapter 1, Subchapter J (CDRH Certified)

# Specifications

Item		Description	Remarks
Engine	Speed	8 PPM	
	Resolution	600 DPI	
	Developing method / Toner	Eletrophotography Non-mag monocomponent	
	Warm up time	Less than 30 sec.	at normal condition
	First print time	Less than 19 sec.	from idle mode
	Duty cycle	Maximum 6,000 pages per month	
	Size (w x d x h)	13.6 x 14.4 x 8.8 in (345 x 365 x 224mm)	
	Weight	Less than 16.5 lb (7.5 Kg)	
	Power consumption	Printing: 200 W avg./450 W max.	USA: 100~127 VAC, 47~63 Hz
		Sleep mode: Less than 25 W	EUROPE: 220~240 VAC, 47~63 Hz
	Noise level	Printing: <48 dBA, Idle: <33 dBA	Measurement by ISO7779
Sleep mode: Background noise			
Paper Handling	Input capacity	150 sheets (automatic feeder) 1 sheet (manual feeder)	Multi-page feeding
	Output capacity	100 sheets in face-down stacker 1 sheet in face-up stacker	
	Paper size	A4, Letter, Legal, Executive, B5 COM-10, Monarch, DL, C5, C6, A5	
Toner Cartridge	Type	Cartridge	
	Life time	2,500 pages at 5 % density	
	Charging/Transfer	Contact roller Charging & Transfer	
Controller	CPU	ASIC	By Controller
	Emulation	SuperDriver	
	Memory	1MB	
	Interface	IEEE1284 B type 1	
	Minimum System Requirement	A 486 with 16 MB of RAM. Our driver is supported in Win 3.1X, Win 95/98 and Win NT 4.0.	